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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,007	01/16/2002	Markus Doetsch	L&L-10003	6346
24131	7590	09/16/2004	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			TRAN, KHAI	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

42

Office Action Summary	Application No.	Applicant(s)	
	10/047,007	DOETSCH ET AL.	
	Examiner	Art Unit	
	KHAI TRAN	2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-11, 13 and 14 is/are rejected.
- 7) ☒ Claim(s) 4, 5 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, line 1, the term "the channel coder" lacks antecedent basis.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2637

4. Claims 1-2, 6-8, 9, 10-11, 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaura et al (U.S. Pat. 5,321,721) in view of Gold et al (U.S. Pat. 5,790,591).

Regarding claim 1, Yamaura et al disclose a method for generating a channel coded and subscriber coded message signal in a transmitter, the transmitter having a coding device (an encoder 102) shown in Figure 14, for receiving a message signal represented by a sequence of data symbols, for channel coding the received message signal using a channel code, and for subscriber coding the message signal with a specific subscriber code selected from a plurality of available subscriber codes (the PN code generator is supplied with one of the clock signals generated by a plurality of clock generators 56₁, 56₂ ... The clock signal to the PN code generator is selected by a changeover switch 55 (see col. 11, lines 38-62 and col. 12, lines 52-68); and for emitting a channel coded and subscriber coded message signal to be transmitted (see Fig. 14). Yamaura et al fail to disclose the specific subscriber code having a maximum Hamming distance.

Gold et al disclose the codes having maximum Hamming distance (see col. 26, lines 12-19). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the maximum Hamming distance as taught by Gold et al into the coding of Yamaura et al for performing correction of the error coding.

Regarding claim 2, Yamaura et al disclose a step of generating message signals for a radio transmitter (see Fig.14).

Regarding claim 6, Yamaura et al disclose a step of selecting the specific subscriber code as a function of the service to be transmitted (col. 11, lines 38-62).

Regarding claims 7 and 8, Yamaura et al disclose a transmitter-receiver based on CDMA. Yamaura and Gold et al fail to disclose a use of the subscriber coding as a DS-CDMA and MC-CDMA (Multi-carrier- CDMA) codes. However, the DS-CDMA and MC-CDMA (Multi-carrier- CDMA) codes are well known the spread spectrum communication system. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the DS-CDMA and MC-CDMA (Multi-carrier- CDMA) codes as the subscriber code in the teachings of Yamaura et al in order to implement a reduced power consumption.

Claims 9-10 are similar to claim 1. Therefore, claims 9-10 are rejected under a similar rationale.

Regarding 11, Yamaura et al disclose wherein the coding device being incorporated in a mobile radio transmitter (see Fig. 14).

Claims 13-14 are similar to claims 7 and 8. Therefore, claims 13-14 are rejected under a similar rationale.

Allowable Subject Matter

5. Claims 4-5, 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claim 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takai (U.S. Pat. 5,978,412) discloses a spread spectrum communication system.

Kim et al (U.S. Pat. 6,512,753) disclose a CDMA communication system.

Nobelden (U.S. Pat. 6,532,563) discloses an incremental redundancy radio link protocol.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI TRAN whose telephone number is (571) 272-3019. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAY PATEL can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2637

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KHAI TRAN
Primary Examiner
Art Unit 2637

September 14, 2004